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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/595,026	12/21/2005	Rommer Stefan	P17753-US1	1372
27045	7590	09/04/2008		
ERICSSON INC. 6300 LEGACY DRIVE M/S EVR 1-C-11 PLANO, TX 75024			EXAMINER CHAMBERS, TANGELA T	
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			2617	
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			09/04/2008	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/595,026

**Applicant(s)**

STEFAN, ROMMER

**Examiner**

TANGELA T. CHAMBERS

**Art Unit**

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 July 2008.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-8 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 02 July 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)  
3) ☒ Information Disclosure Statement(s) (PTO/CIS)  
Paper No(s)/Mail Date \_\_\_\_\_  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This action is in response to the amendment and arguments filed on 7/2/2008.
2. Claims 1-2 and 4-8 have been amended.
3. Claims 1-8 are rejected.

#### ***Information Disclosure Statement***

4. The IDS filed on July 2, 2008 have been acknowledged by the examiner.

#### ***Response to the Arguments***

5. The applicant's arguments filed on 7/2/2008 have been fully considered, but they are not persuasive. In the Remarks, the applicant has argued in substance:

(1) The applicant argued features, i.e., a network with at least one access point and one access controlling node, the access points making use of Inter-Access Point Protocol for communication. The mobile station associates with the access points upon approval of its identity by the access controlling node. Said access controlling node monitors whether the mobile station has access to any of the access points and monitors an account related to the mobile station. If it detected that the account has a zero balance, an IAPP message is issued causing the mobile station to be terminated from the access point it is associated.

Response:

- (1) The argued features read upon Luo.

Luo discusses multiple access points using Inter-Access Point Protocol. Thus Luo shows the limitation of "a network comprising at least one access point (AP) and one access controlling node, the access points making use of the Inter-Access Point Protocol (IAPP) for communication".

Luo discusses a mobile station associating with an access point and being automatically authenticated to the network. Thus Luo shows the limitation of "wherein

at least one mobile station may associate with the access points wherein the identity of the mobile station can be approved by the access controlling node".

Luo discusses that every access point maintains a mobile state table to keep track of mobiles that are or had been associated with it. Thus Luo shows the limitation of "the access controlling node monitors whether a given mobile station has access to any of a given subset of access points".

Luo did not disclose the access controlling node monitors an account relating to the given mobile station associated with a given access point of the subset of access points. Thus Luo was modified with Philsgard et al (Philsgard) to show such features were obvious in the art.

Luo did not disclose if detecting that the account relating to the given mobile station has a balance of zero, the at least one access-controlling node issues at least one IAPP message causing the access point of the subset with which the mobile station is currently associated to disassociate the given mobile station, thereby terminating access for the given mobile station. Thus Luo is modified with Jiang et al (Jiang) to show such features were obvious in the art.

(2) Regarding the applicant's arguments within several of the dependencies, Luo, as discussed above, disclosed those limitations or Luo as modified by the secondary references Philsgard, Jiang, Funato, Sanda and Prasad et al show those limitations.

As a result, the argued features read upon the references as follows:

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3 and 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luo (US Patent Publication No. 2003/0169713 A1), in view of Philsgard et al (US Patent Publication No. 2004/0248547 A1) and in further view of Jiang et al (Jiang) (US Patent Publication No. 2008/0101291 A1).

As per claims 1, 7 and 8, Luo discloses:

- ***A network comprising at least one access point (AP) and one access controlling node, the access points making use of the Inter-Access Point Protocol (IAPP) for communication***, (Luo, Fig. 1, Page 3, Paragraphs [0019]-[0020], "The intra-subnet mobility is supported using IAPP.").
- ***wherein at least one mobile station may associate with the access points wherein the identity of the mobile station can be approved by the access controlling node***, (Luo, Page 4, Paragraph [0028]).
- ***the access controlling node monitors whether a given mobile station has access to any of a given subset of access points***, (Luo, Page 3, Paragraph [0022] and Page 4, Paragraph [0029], "The mobile state transfer protocol is used for an access point to download the state record from the centralized database 108 for a mobile host 106 that arrives at the access point 102.").

Luo does not specifically disclose the following limitations:

- ***the access controlling node monitors an account relating to the given mobile station associated with a given access point of the subset of access points***, However, Philsgard in an analogous art discloses the above limitation. (Philsgard, Page 1, Paragraph [0027], Page 3, Paragraphs [0060]-[0061] and Page 4, Paragraphs [0076]-[0079], "In the event of a positive response to an authentication request, information regarding the end user's unique product profile associated with the end user's account will be retrieved from the storage structure comprised in the SCS.").

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Philsgard into the network of Luo to monitor an account relating to a mobile station. The modification would be obvious because one of ordinary skill in the art would want to determine which mobile stations have a valid account and disable mobile stations which have invalid accounts. (Philsgard, Page 4, Paragraph [0077] and Pages 4-5, Paragraph [0083]).

- ***if detecting that the account relating to the given mobile station has a balance of zero***, However, Jiang in an analogous art discloses the above limitation. (Jiang, Page 11, Paragraph [0144] and Page 15, Paragraph [0179], "Successful user authentication results in the Provisioning System 304 returning User's subscribed profile (authorization information) to the Home AAA, for onward transmission to the PDSN 108. For pre-paid users, the authentication process may include verification of users account balance etc. also[.]", Jiang teaches that the balance of an account is checked in order for successful authentication to occur.
- ***the at least one access-controlling node issues at least one IAPP message causing the access point of the subset with which the mobile station is currently associated to disassociate the given mobile station, thereby terminating access for the given mobile station***, (Jiang, Page 8, Paragraph [0089]), Jiang teaches termination of a user service for certain events such as the occurrence of an accounting trigger. It would be obvious to one of ordinary skill in the art that such a trigger would be a zero balance.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Jiang into the teaching of Luo and Philsgard to terminate the access of a mobile station with a zero balance. The modification would be obvious because one of ordinary skill in the art would want the advantage of unified access to both WWANs and WLANs without service interruption as a mobile roams across different networks. (Jiang, Page 1, Paragraphs [0007]-[008]).

As per claim 2, the rejection of claim 1 is incorporated and Luo further discloses:

- ***wherein the access-controlling node is an authentication server connected to the Internet***, (Luo, Fig. 1 and Page 3, Paragraph [0020]).

As per claim 3, the rejection of claim 2 is incorporated and Luo further discloses:

- ***wherein a second access control node is provided, the second access control node being a gateway node***, (Luo, Page 5, Paragraph [0035]).

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Luo (US Patent Publication No. 2003/0169713 A1), in view of Philsgard et al (US Patent Publication No. 2004/0248547 A1), in further view of Jiang et al (Jiang) (US Patent Publication No. 2008/0101291 A1) and in further view of Funato et al (Funato) (US Patent Publication No. 2003/0145092 A1).

As per claim 4, the rejection of claim 2; however neither Luo, Philsgard nor Jiang specifically disclose:

- ***wherein the access-controlling node issues an IAPP ADD-notify message***,  
However, Funato in an analogous art discloses the above limitation. (Funato, Page 10, Paragraph [0091], "The root access point of the new access point group will then communicate the MAC address and AID of the computing device to the other access points in the new access point group. This communication occurs during association and thru the use of IAPP to broadcast the IAPP-ADD.request (which includes the MAC address and AID of the computing device) over the local subnet broadcast using IAPP to all the access points on the same subnet.").

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Funato into the network of Luo and Philsgard to issue an IAPP ADD notify message. The modification would be obvious because one of ordinary skill in the art would want a way to locate a mobile station by associating the device with an access point as needed or whenever it is

paged. (Funato, Page 10, Paragraph [0091]).

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Luo (US Patent Publication No. 2003/0169713 A1), in view of Philsgard et al (US Patent Publication No. 2004/0248547 A1), in view of Jiang et al (Jiang) (US Patent Publication No. 2008/0101291 A1) and in further view of Sanda (US Patent Publication No. 2006/0013174 A1).

As per claim 5, the rejection of claim 2 is incorporated; however neither Luo, Philsgard nor Jiang specifically disclose:

- ***wherein the access-controlling node issues an IAPP MOVE-notify message,***  
However, Sanda in an analogous art discloses the above limitation. (Sanda, Page 6, Paragraphs [0072]-[0075], "In STEP 407, the APME section 302a of the AP 302 transmits IAPP-MOVE.request which is a primitive indicating a request for execution of IAPP-MOVE to an IAPP section 302c. Receiving this primitive, the IAPP section 302c transmits IAPP-MOVE.notify which is a signal indicating a request for data about the MN 100 which did handover to the subnetwork 300 to the IAPP section 202c of the AP 202 in STEP 408.").

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Sanda into the network of Luo, Philsgard and Funato to issue an IAPP move notify message. The modification would be obvious because one of ordinary skill in the art would want a way for the mobile station to move from one access point to another while maintaining wireless communication. (Sanda, Page 5, Paragraph [0069]).

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Luo (US Patent Publication No. 2003/0169713 A1), in view of Philsgard et al (US Patent Publication No. 2004/0248547 A1), in view of Jiang et al (Jiang) (US Patent Publication No.



2008/0101291 A1) and in further view of Prasad et al (Prasad) (US Patent No. 7,197,125 B1).

As per claim 6, the rejection of claim 3 is incorporated; however neither Luo, Philsgard nor Jiang disclose:

- ***wherein the access-controlling node issues a Lock out request to the gateway node***, However, Prasad in an analogous art discloses the above limitation. (Prasad, Column 10, Lines 44-58, "The authentication server performs the authentication and returns either an ACCESS ACCEPT (if authentication succeeds) or an ACCESS REJECT (if the authentication fails). If the authentication fails then the service selection gateway sends an appropriate error message to the client and the processing stops."), Prasad teaches the authentication server sending a lock out (reject) message to the gateway node.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Prasad into the network of Luo, Philsgard and Funato to issue a lock out request to the gateway node. The modification would be obvious because one of ordinary skill in the art would want to prevent unauthorized users from gaining access to the network. (Prasad, Abstract).

### ***Conclusion***

7. The prior art not relied upon but considered pertinent to applicant's disclosure is made of record and listed on form PTO-892.

Applicant's amendment necessitated the new ground(s) of rejection presented in this office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TANGELA T. CHAMBERS whose telephone number is 571-270-3168. The examiner can normally be reached Monday through Thursday, 9:00am-6:30pm Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nick Corsaro, can be reached at 571-272-7876. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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August 22, 2008

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